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**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Application Number: 10/820,972

Filing Date: April 08, 2004

Appellant(s): BAILEY ET AL.

Robert J. Toth
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 06/19/2009 appealing from the Office action
mailed 05/19/2009.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

4407955	Muller	10-1983
5766366	Ferguson	6-1998

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claims 1-7, 10-15, 18-23, 26-33, and 46-50 are rejected under 35 U.S.C. 103(a) as obvious over U.S. Patent No. 5,766,366 to Ferguson et al. , in view of U. S. Patent No. 4,407,955 to Muller et al.

Regarding claims 1-4, 10-12 and 18-23, Ferguson et al. disclose a process of making an acid modified starch by reacting starch, which can be any kind of starch such as milo and corn (col. 2, lines 25), with hydrochloric acid at a temperature of 21 °C to 77 °C (col. 4, lines 41-42).

But they do not specifically disclose that the starch is made from dry mill process.

However, it would have been obvious to one of ordinary skill in the art at the time of invention by appellant to use dry mill starch in the Ferguson et al. process, motivated by the fact that Muller et al., also drawn to starch treatment, disclose that starch made from dry mill process is cheap and economic (col. 2, lines 31-41).

Since the acid modified starch of combined teaching of Ferguson et al. and Muller et al. is made by a process substantially identical with the process for making the starch recited in the instant claims. It is reasonably expected that the modified starch of Ferguson et al. and Muller et al. (the fat or protein or viscosity profile) is similar to that of the instant claims absent any evidence to the contrary.

Regarding claims 5-7, 13-15 and 26-33, Ferguson et al. disclose a process of making an acid modified starch by reacting a starch component, which can be any kind of starch such as milo and corn (col. 2, lines 25-30), with an acid component (col. 4,

lines 46-50). The acid is hydrochloric acid (col. 3, lines 2 and 3). The reaction is carried out at a temperature of 21 °C to 77 °C (col. 4, lines 41-42) for about 0.5 – 6 hours (col. 5, line 17).

But they do not specifically disclose that the starch is made from dry mill process.

However, it would have been obvious to one of ordinary skill in the art at the time of invention by appellant to use dry mill starch in the Ferguson et al. process, motivated by the fact that Muller et al., also drawn to starch treatment, disclose that starch made from dry mill process is cheap and economic (col. 2, lines 31-41).

Since the acid modified starch of combined teaching of Ferguson et al. and Muller et al. is made by a process substantially identical with the process for making the starch recited in the instant claims. It is reasonably expected that the modified starch of Ferguson et al. and Muller et al. (the fat or protein or viscosity profile) is similar to that of the instant claims absent any evidence to the contrary.

Regarding claims 46-50, Ferguson et al. disclose a process of making an acid modified starch by reacting a starch component, which can be any kind of starch (col. 2, lines 7 and 8) and any source of starch such as milo and corn (col. 2, lines 25-30), with an acid component (col. 4, lines 46-50). The acid is hydrochloric acid (col. 3, lines 2 and 3). The reaction is carried out at a temperature of 21 °C to 77 °C (col. 4, lines 41-42) for about 0.5 – 6 hours (col. 5, line 17). But they do not specifically disclose that the starch is made from dry mill process.

However, it would have been obvious to one of ordinary skill in the art at the time of invention by appellant to use dry mill starch in the Ferguson et al. process, motivated

by the fact that Muller et al., also drawn to starch treatment, disclose that starch made from dry mill process is cheap and economic (col. 2, lines 31-41).

Since the acid modified starch of combined teaching of Ferguson et al. and Muller et al. is made by a process substantially identical with the process for making the starch recited in the instant claims. It is reasonably expected that the modified starch of Ferguson et al. and Muller et al. (the fat or protein or viscosity profile) is similar to that of the instant claims absent any evidence to the contrary.

(10) Response to Argument

Please note that the appellant admitted that acid treated dry-milled starch is the same as acid treated dry-milled flour.

Appellant argues that the Examiner fail to properly establish a *prima facie* case under 35 U. S. C. 103(a). The Examiner respectfully submits that Ferguson et al disclose a composition is made by a process of treating starch with acid. The process is substantial similar to the instant appellant's acid treatment. The starch is treated with hydrochloric acid at a temperature of 21 °C to 77 °C (col. 4, lines 41-42). The starch can be any kind of starch base such as milo and corn (col. 2, lines 25), with hydrochloric acid at a temperature of 21 °C to 77 °C (col. 4, lines 41-42). Although Ferguson et al. is silent that the starch is from dry-milled process, they specifically disclose that any kind of starch can be used in their process. It is known that starch is generally obtained by either dry-milled process or wet-milled process. Muller et al. (the secondary reference) disclose that dry-mill starch is in general cheap and economic. Therefore, it would have been obvious to one of the ordinary skill in the art at the time of invention by appellant to

use the dry-milled starch in Ferguson et al's acid treated process because of the economic reason.

Appellant argues that Ferguson uses relatively pure starch. The Examiner respectfully submits that Ferguson disclose that any kind of starch base material can be used. It is not limited to pure starch.

Appellant argues that Ferguson fail to disclose that the starch is dry-milled starch. The Examiner respectfully submits that Ferguson disclose that any starch can be used in their process and Muller disclose the use of the dry-milled starch for cost reason. It should be noted that "A reference can be used for all it realistically teaches and is not limited to the disclosures in its specific examples". See In re Van Marter et al 144 USPQ 421; In re Windmer et al 147 USPQ 518, 523; and In re Chapman et al 148 USPQ 711.

Appellant argues that the Muller (the secondary reference) disclose a process of making sugar from dry-milled starch. The Examiner respectfully submits that Muller is used to show why the dry-milled starch is preferred to be used in Ferguson's process as starting material. Muller discloses that dry-mill starch is cheap and economic.

Regarding claims 1, 5, 47 and 48, appellant argues that starch composition of Ferguson is different from the instant application's flour composition. The Examiner respectfully submits that Ferguson disclose that any starch base can be used in their process and Muller disclose that dry-milled starch is cheap and economic. In response to appellant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on

combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). In this case, the combined teaching of Ferguson and Muller et al. disclose a composition obtain by treating the dry-milled starch with acid.

Appellant argues that Ferguson discloses the using of the wet-milled starch. The Examiner respectfully submits that Ferguson disclose that any kind of starch can be used in their process. It should be noted that "A reference can be used for all it realistically teaches and is not limited to the disclosures in its specific examples". See In re Van Marter et al 144 USPQ 421; In re Windmer et al 147 USPQ 518, 523; and In re Chapman et al 148 USPQ 711.

As for the argument that Ferguson disclose the various base starch by using names such as amylopectin, and amylos means that the base starch is wet-milled starch, the Examiner respectfully submits that dry-milled starch also containing those chemicals.

Appellant argues that Muller uses starch to make a different compound. The Examiner respectfully submits that the reference of Muller is used to show that one of the ordinary skills in the art would like to use dry-milled starch as the starting material in the process of Ferguson because that the dry-milled starch is cheap and economic.

Appellant argues that the dry-milled starch is not compatible with the purpose and technical disclose of the Ferguson. The Examiner respectfully submits that Ferguson disclose that any kind of base starch can be used in their process and Muller disclose that dry-milled starch as starting material is cheap. It would have been obvious

to one of ordinary skill in the art at the time of invention by appellant to use dry-milled starch in Ferguson's starch treatment process motivated by the fact that Muller discloses that dry-milled starch is cheap and economic. It should be noted that "A reference can be used for all it realistically teaches and is not limited to the disclosures in its specific examples". See In re Van Marter et al 144 USPQ 421; In re Windmer et al 147 USPQ 518, 523; and In re Chapman et al 148 USPQ 711.

Appellant argues that the combined teaching of the Ferguson and Muller et al. composition made by the acid treatment process does not necessarily possess the properties recited in claim 1. The Examiner respectfully submits that the Appellant fails to provide any factual evidence to show that the composition obtained by the combined teaching of the Ferguson and Muller fail to have the properties as appellant set forth in claim 1. The Appellant 's argument can not take place of the evidence.

Appellant argue that combined teaching of the Ferguson and Muller fail to disclose the processing parameter. The Examiner respectfully submits that the instant claims are drawn to a composition. Eventhough product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process." In re Thorpe, 77F.2d 695, 698,227 USPQ 964,966 (Fed. Cir. 1985) (citations omitted).

Appellant argues that combined teaching of Ferguson and Muller excludes the protein content. The examiner respectfully submits that the Muller teaching using of dry-milled starch, which contains protein.

The appellant argues that the Examiner fail to disclose why one of the ordinary skills in the art would like to use dry-milled starch in Ferguson's process. The Examiner respectfully submits that the Muller teaches that the dry-milled starch is cheap and economic.

The appellant argues that the protein and fat content serves no purpose for the Ferguson. The Examiner respectfully submits that Ferguson is not again the existence of them (fat and protein) and using the dry-milled starch (containing protein and fat) is cheap. Therefore, using of the dry-milled starch reduces the cost of the Ferguson process.

The appellant argues that there is a substantial difference between the composition of the combined teaching of Ferguson and Muller and the composition of instant application. The Examiner respectfully submits that the appellant fail to provide any factual evidence to show the difference. The appellant's argument can not take place of the evidence.

The appellant argues that the prior art fail to disclose the viscosity of the composition. The Examiner respectfully submits that combined teaching of Ferguson and Muller disclose a composition is made by a process of substantial similar to that of the appellant's. Similar process produces similar product. The viscosity would be necessarily followed from of the combined teaching of Ferguson and Muller. The

appellant fail to provide any factual evidence to show the contrary. The appellant's argument can not take place of the evidence.

Regarding claim 10 and 13, appellant argues that the prior art fail to disclose the viscosity of the composition. The Examiner respectfully submits that combined teaching of Ferguson and Muller disclose a composition is made by a process of substantial similar to that of the appellant's. Similar process produces similar product. The viscosity would be necessarily followed from of the combined teaching of Ferguson and Muller. The appellant fail to provide any factual evidence to show the contrary. The appellant's argument can not take place of the evidence.

Appellant argues that the prior art fail to disclose the protein content of the composition. The Examiner respectfully submits that combined teaching of Ferguson and Muller disclose a composition is made by a process of substantial similar to that of the appellant's. Similar process produces similar product. The protein content would be necessarily followed from of the combined teaching of Ferguson and Muller. The appellant fail to provide any factual evidence to show the contrary. The appellant's argument can not take place of the evidence.

Appellant argues that the prior art fail to disclose the fat content of the composition. The Examiner respectfully submits that combined teaching of Ferguson and Muller disclose a composition is made by a process of substantial similar to that of the appellant's. Similar process produces similar product. The fat content would be necessarily followed from of the combined teaching of Ferguson and Muller. The

appellant fail to provide any factual evidence to show the contrary. The appellant's argument can not take place of the evidence.

Regarding claims 18 and 48, appellant argues that the prior art fail to disclose the viscosity of the composition. The Examiner respectfully submits that combined teaching of Ferguson and Muller disclose a composition is made by a process of substantial similar to that of the appellant's. Similar process produces similar product. The viscosity would be necessarily followed from of the combined teaching of Ferguson and Muller. The appellant fail to provide any factual evidence to show the contrary. The appellant's argument can not take place of the evidence.

Appellant argues that the prior art fail to disclose the protein content of the composition. The Examiner respectfully submits that combined teaching of Ferguson and Muller disclose a composition is made by a process of substantial similar to that of the appellant's. Similar process produces similar product. The protein content would be necessarily followed from of the combined teaching of Ferguson and Muller. The appellant fail to provide any factual evidence to show the contrary. The appellant's argument can not take place of the evidence.

Appellant argues that the prior art fail to disclose the fat content of the composition. The Examiner respectfully submits that combined teaching of Ferguson and Muller disclose a composition is made by a process of substantial similar to that of the appellant's. Similar process produces similar product. The fat content would be necessarily followed from of the combined teaching of Ferguson and Muller. The

appellant fail to provide any factual evidence to show the contrary. The appellant's argument can not take place of the evidence.

Regarding claim 26 and 49, appellant argues that the prior art fails to disclose the limitation of claim 26. The Examiner respectfully submits that It is noted that claim 26 duct-by-process claims. Eventhough product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process." *In re Thorpe*, 77F.2d 695, 698,227 USPQ 964,966 (Fed. Cir. 1985) (citations omitted). Ferguson et al disclose a composition is obtained by a process of treating starch with acid. The process is substantial similar to the instant application's acid treatment. The Starch is treated with hydrochloric acid at a temperature of 21 °C to 77 °C (col. 4, lines 41-42). The starch can be any kind of starch such as milo and corn (col. 2, lines 25), with hydrochloric acid at a temperature of 21 °C to 77 °C (col. 4, lines 41-42). Although Ferguson et al. is silent that the starch is dry-milled, they specifically disclose that any kind of starch can be used in their process. It should be noted that "A reference can be used for all it realistically teaches and is not limited to the disclosures in its specific examples". See *In re Van Marter et al* 144 USPQ 421; *In re Windmer et al* 147 USPQ 518, 523; and *In re Chapman et al* 148 USPQ 711. It is known starch is generally obtained by either dry-mill process or wet-mill process. Muller et al. (the secondary reference) disclose that dry-mill starch is general cheap and economic. Therefore, it

would have been obvious to one of the ordinary skill in the art at the time of invention by appellant to use the dry-milled starch in Ferguson et al's acid treated process because of the economic reason.

Appellant argues that the prior art fail to recognize the intended use of the composition in the gypsum board. The Examiner respectfully submits that in response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., use in the gypsum board) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). Furthermore, in response to applicant's argument that the composition is intended being used in gypsum board, a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim.

Appellant argues that the prior art fails to disclose the fat content of the composition. The Examiner respectfully submits that combined teaching of Ferguson and Muller disclose a composition is made by a process of substantial similar to that of the appellant's. Similar process produces similar product. The fat content would be necessarily followed from of the combined teaching of Ferguson and Muller. The appellant fail to provide any factual evidence to show the contrary. The appellant's argument can not take place of the evidence.

Regarding claim 50, appellant argues that the prior art fails to disclose the viscosity of the composition. The Examiner respectfully submits that combined teaching of Ferguson and Muller disclose a composition is made by a process of substantial similar to that of the appellant's. Similar process produces similar product. The viscosity would be necessarily followed from the combined teaching of Ferguson and Muller. The appellant fail to provide any factual evidence to show the contrary. The appellant's argument can not take place of the evidence.

The Examiner acknowledges the status of the claims. However, the claims 8-9, 16-17, 24-25 and 34-35 would not be rejoined since the rejection of claim 1-7, 10-15, 18-13, 26-33 and 46-50 stands.

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

/Shuangyi Abu-Ali/

Examiner, Art Unit 1793

Conferees:

/Christopher A. Fiorilla/

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Supervisory Patent Examiner, Art Unit 1700

Application/Control Number: 10/820,972
Art Unit: 1793

Page 15

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